

DIABETES IN SEMDON

Estimated Number of Persons With Diabetes (PWD) in SEMDON

Estimates from the Michigan Behavioral Risk Factor Surveillance System (BRFSS) using a three year average, 2001-2003, indicate that in 2002 approximately **302,060 adults (aged 18 and up) have been diagnosed with diabetes.**¹ This includes an estimated **11,880 Latinos/Hispanics (8.65%)** diagnosed with diabetes.² In addition, it is estimated that **3,260 or 0.32% persons under the age of 18** have been diagnosed with diabetes.³ National studies suggest that an additional **109,870 adults have diabetes but are not aware of it.**⁴ Among adults, **738,442 have pre-diabetes** (40.1% of adults 40-74 years of age).⁵

Estimated Number of Persons in SEMDON in 2002 Diagnosed with Diabetes¹

| Age Group | Total* | Female | Male | White | African American |
|--------------|----------------|----------------|----------------|----------------|------------------|
| 18-44 | 51,470 | 23,100 | 28,370 | 28,980 | 13,990 |
| 45-54 | 68,510 | 32,900 | 35,610 | 44,940 | 16,960 |
| 55-64 | 71,590 | 35,720 | 35,870 | 45,720 | 22,510 |
| 65-74 | 56,170 | 29,790 | 26,380 | 35,240 | 20,310 |
| 75+ | 55,080 | 33,450 | 21,630 | 38,820 | 13,500 |
| Total | 302,820 | 154,960 | 147,860 | 193,700 | 87,270 |
| (95% CI**) | (±26,980) | (±18,130) | (±19,710) | (±20,390) | (±23,670) |

* Difference in totals is due to presence of 21,850 of "other races" in the survey and the effects of rounding.

** 95% CI represents the range within which the actual number of persons with diabetes in SEMDON may fall with 95% confidence.

Diabetes Deaths

In 2002, diabetes was the 6th leading cause of death in Michigan. Diabetes was the primary cause of death for 1211 individuals (2.9% of all deaths) and a contributing cause in an additional 2,277 deaths (5.4%).⁶

Deaths in SEMDON of PWD for the Year 2002 with Diabetes Listed as the Primary Cause Number of Deaths (Rates per 1,000 Diabetic Population)

| Age Group | Total* | Female | Male | White | Female | Male |
|--------------|--------------------|-------------------|-------------------|-------|-------------------|-------------------|
| 0-44 | 46 (0.89) | 10 (0.84) | 15 (0.88) | | 9 (1.16) | 11 (1.77) |
| 45-54 | 95 (1.39) | 17 (0.87) | 37 (1.45) | | 16 (1.47) | 24 (3.97) |
| 55-64 | 152 (2.12) | 51 (2.19) | 57 (2.54) | | 21 (1.87) | 23 (2.04) |
| 65-74 | 268 (4.77) | 80 (4.58) | 107 (6.01) | | 48 (3.63) | 29 (4.09) |
| 75+ | 650 (11.80) | 295 (12.74) | 218 (13.91) | | 85 (9.18) | 46 (10.85) |
| Total | 1211 (4.01) | 453 (4.75) | 434 (4.41) | | 179 (3.42) | 133 (3.81) |

*Any difference in the totals is due to presence of deaths of "other races". NA – Not Able to calculate with 6 or less deaths

Diabetes Hospitalizations Reported in the Michigan Inpatient Data Base (MIDB)⁷ In 2002, there were 116,781 hospital discharges of SEMDON residents where diabetes was listed among the diagnoses. There were 8,952 (7.7%) of these hospitalizations that were directly due to diabetes, while an additional 37,375 (32.0%) involved hypertension and cardiovascular disease, conditions commonly associated with diabetes. In 2000, the comparable figures were 102,090 discharges with 8,262 (6.9%) directly attributed to diabetes.

Primary Reason for Hospitalization

| Condition | 2000 | | 2002 | |
|--------------|----------------|---------|----------------|---------|
| | Count | Percent | Count | Percent |
| Diabetes | 8,262 | 6.9% | 8,952 | 7.7% |
| Hypertension | 2,683 | 0.8% | 2,888 | 2.5% |
| Other CVD | 32,615 | 34.1% | 34,487 | 29.5% |
| Kidney | 1,157 | 0.9% | 1,665 | 1.4% |
| Pneumonia | 3,315 | 3.9% | 3,858 | 3.3% |
| Other | 54,058 | 53.5% | 64,931 | 55.6% |
| TOTAL | 102,090 | | 116,781 | |

Non-Traumatic Lower Limb Amputations

In 2002, some form of non-traumatic lower limb amputation occurred in 776 or 8.7% of the 8,952 hospital discharges with a primary diagnosis of diabetes. This compares to 758 amputations or 9.2% of the 8,262 hospitalizations of persons with diabetes in 2000.

- 1) Michigan 2002 population estimates and the three year (2001-03) average from the Behavioral Risk Factor Surveillance System (BRFSS) - a statewide telephone survey of Michigan residents ages 18 years and older.
- 2) BRFSS data 2001 - 2003 rate of 8.65% ±1.64 Confidence Interval of 95% (CI).
- 3) Blue Cross/Blue Shield of Michigan Paid Claims Data, 2001 and BRFSS 2001-2003 data.
- 4) National Health and Nutrition Examination Survey, III 1988-1994 (NHANES III Series 11, No. 1).
- 5) US Health and Human Services news release, March 27, 2004.
- 6) Michigan Department of Community Health (MDCH) 2002 resident death data files.
- 7) Michigan Inpatient (hospital discharge) Database (MIDB) for 2002.

Further information can be obtained from:
Michigan Department of Community Health, Division of Chronic Disease and Injury Control/Diabetes, Kidney and Other Chronic Diseases Section
by calling (517) 335-8445 or on the WEB at: <http://www.michigan.gov/diabetes>

DIABETES IN LIVINGSTON COUNTY

Estimated Number of Persons With Diabetes (PWD) in Livingston County

Estimates from the Michigan Behavioral Risk Factor Surveillance System (BRFSS) using a three year average, 2001-2003, indicate that in 2002 approximately **8,030 adults (aged 18 and up) have been diagnosed with diabetes.**¹ This includes an estimated **170 Latinos/Hispanics (8.65%)** diagnosed with diabetes.² In addition, it is estimated that **120 or 0.32% persons under the age of 18** have been diagnosed with diabetes.³ National studies suggest that an additional **3,350 Livingston County adults have diabetes but are not aware of it.**⁴ Among Livingston County adults, **27,084 have pre-diabetes** (40.1% of adults 40-74 years of age).⁵

Estimated Number of Persons in Livingston County in 2002 Diagnosed with Diabetes (Rate per 100)¹

| Age Group | Total* | Female | Male | White |
|----------------------------|---------------------------------|-------------------------------|-------------------------------|---------------------------------|
| 18-44 | 1,590 (2.4) | 880 (2.7) | 700 (2.1) | 1,540 (2.4) |
| 45-54 | 2,030 (7.4) | 1,160 (8.6) | 860 (6.2) | 1,900 (7.0) |
| 55-64 | 2,020 (12.3) | 880 (10.9) | 1,140 (13.6) | 1,990 (12.2) |
| 65-74 | 1,260 (16.1) | 690 (17.2) | 570 (14.9) | 1,210 (15.6) |
| 75+ | 1,130 (17.6) | 650 (16.6) | 470 (19.0) | 1,100 (17.3) |
| Total (95% CI**) | 8,030 (7.2) (±1,000) | 4,260 (7.7) (±680) | 3,740 (6.8) (±730) | 7,740 (7.2) (±1,000) |

* Difference in totals is due to presence of 280 of "other races" in the survey and the effects of rounding.

** 95% CI represents the range within which the actual number of persons with diabetes in Livingston County may fall with 95% confidence.

Diabetes Deaths

In 2002, diabetes was the seventh leading cause of death for Livingston County residents. Diabetes was the primary cause of death for 24 individuals (2.5% of all deaths) and a contributing cause in an additional 59 deaths (6.3%).⁶

Deaths in Livingston County of PWD for the Year 2002 with Diabetes Listed as the Primary Cause Number of Deaths (Rates per 1,000 Diabetic Population)

| Age Group | Total* | Female | White | Male |
|--------------|------------------|------------------|-------|------------------|
| 0-44 | 0 (NA) | 0 (NA) | | 0 (NA) |
| 45-54 | 1 (NA) | 1 (NA) | | 0 (NA) |
| 55-64 | 5 (NA) | 2 (NA) | | 3 (NA) |
| 65-74 | 7 (5.56) | 1 (NA) | | 6 (NA) |
| 75+ | 11 (9.73) | 6 (NA) | | 5 (NA) |
| Total | 24 (2.99) | 10 (2.46) | | 14 (3.81) |

* Any difference in the totals is due to presence of deaths of "other races". NA – Not Able to calculate with 6 or less deaths

Diabetes Hospitalizations Reported in the Michigan Inpatient Data Base (MIDB)⁷ In 2002, there were 1,988 hospital discharges of Livingston County residents where diabetes was listed among the diagnoses. There were 111 (5.6%) of these hospitalizations that were directly due to diabetes, while an additional 639 (32.1%) involved hypertension and cardiovascular disease, conditions commonly associated with diabetes. In 2000, the comparable figures were 1,614 discharges with 93 (5.8%) directly attributed to diabetes.

Primary Reason for Hospitalization

| Condition | 2000 | | 2002 | |
|--------------|--------------|---------|--------------|---------|
| | Count | Percent | Count | Percent |
| Diabetes | 93 | 5.8% | 111 | 5.6% |
| Hypertension | 15 | 0.9% | 18 | 0.9% |
| Other CVD | 550 | 34.1% | 621 | 31.2% |
| Kidney | 18 | 1.1% | 28 | 1.4% |
| Pneumonia | 73 | 4.5% | 55 | 2.8% |
| Other | 865 | 53.6% | 1,155 | 58.1% |
| TOTAL | 1,614 | | 1,988 | |

Non-Traumatic Lower Limb Amputations

In 2002, some form of non-traumatic lower limb amputation occurred in 13 or 11.7% of the 111 hospital discharges with a primary diagnosis of diabetes. This compares to 17 amputations or 18.3% of the 93 hospitalizations of persons with diabetes in 2000.

- 1) Michigan 2002 population estimates and the three year (2001-03) average from the Behavioral Risk Factor Surveillance System (BRFSS) - a statewide telephone survey of Michigan residents ages 18 years and older.
- 2) BRFSS data 2001 - 2003 rate of 8.65% ±1.64 Confidence Interval of 95% (CI).
- 3) Blue Cross/Blue Shield of Michigan Paid Claims Data, 2001 and BRFSS 2001-2003 data.
- 4) National Health and Nutrition Examination Survey, III 1988-1994 (NHANES III Series 11, No. 1).
- 5) US Health and Human Services news release, March 27, 2004.
- 6) Michigan Department of Community Health (MDCH) 2002 resident death data files.
- 7) Michigan Inpatient (hospital discharge) Database (MIDB) for 2002.

Further information can be obtained from:

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DIABETES IN MACOMB COUNTY

Estimated Number of Persons With Diabetes (PWD) in Macomb County

Estimates from the Michigan Behavioral Risk Factor Surveillance System (BRFSS) using a three year average, 2001-2003, indicate that in 2002 approximately **48,570 adults (aged 18 and up) have been diagnosed with diabetes.**¹ This includes an estimated **1,090 Latinos/Hispanics (8.65%)** diagnosed with diabetes.² In addition, it is estimated that **490 or 0.32% persons under the age of 18** have been diagnosed with diabetes.³ National studies suggest that an additional **17,790 Macomb County adults have diabetes but are not aware of it.**⁴ Among Macomb County adults, **126,620 have pre-diabetes** (40.1% of adults 40-74 years of age).⁵

Estimated Number of Persons in Macomb County in 2002 Diagnosed with Diabetes (Rate per 100)¹

| Age Group | Total* | Female | Male | White | African American |
|----------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|-------------------------------|
| 18-44 | 7,960 (2.5) | 3,320 (2.1) | 4,650 (2.9) | 6,300 (2.2) | 510 (3.6) |
| 45-54 | 10,830 (9.4) | 4,630 (7.9) | 6,200 (10.8) | 9,450 (8.7) | 450 (13.2) |
| 55-64 | 11,540 (14.9) | 5,770 (14.4) | 5,760 (15.4) | 9,790 (13.2) | 410 (26.4) |
| 65-74 | 9,120 (16.6) | 4,560 (14.9) | 4,540 (18.7) | 8,020 (15.1) | 340 (42.1) |
| 75+ | 9,120 (16.6) | 5,720 (16.2) | 3,610 (18.4) | 8,680 (16.1) | 180 (30.5) |
| Total (95% CI**) | 48,570 (7.4) (±4,610) | 24,000 (7.0) (±3,070) | 24,760 (7.8) (±3,400) | 42,240 (6.9) (±4,310) | 1,890 (10.8) (±660) |

* Difference in totals is due to presence of 5,030 of "other races" in the survey and the effects of rounding.

** 95% CI represents the range within which the actual number of persons with diabetes in Macomb County may fall with 95% confidence.

Diabetes Deaths

In 2002, diabetes was the fifth leading cause of death for Macomb County residents. Diabetes was the primary cause of death for 216 individuals (2.9% of all deaths) and a contributing cause in an additional 431 deaths (5.8%).⁶

Deaths in Macomb County of PWD for the Year 2002 with Diabetes Listed as the Primary Cause Number of Deaths (Rates per 1,000 Diabetic Population)

| Age Group | Total* | Female | White Male | African American Female | African American Male |
|--------------|-------------------|------------------|-------------------|-------------------------|-----------------------|
| 0-44 | 5 (NA) | 1 (NA) | 4 (NA) | 0 (NA) | 0 (NA) |
| 45-54 | 18 (1.66) | 4 (NA) | 11 (1.95) | 2 (NA) | 1 (NA) |
| 55-64 | 32 (2.77) | 12 (2.31) | 20 (4.36) | 0 (NA) | 0 (NA) |
| 65-74 | 48 (5.26) | 17 (4.39) | 28 (6.81) | 0 (NA) | 1 (NA) |
| 75+ | 113 (12.39) | 59 (11.30) | 52 (15.62) | 1 (NA) | 0 (NA) |
| Total | 216 (4.45) | 93 (4.56) | 115 (5.37) | 3 (NA) | 2 (NA) |

*Any difference in the totals is due to presence of deaths of "other races". NA – Not Able to calculate with 6 or less deaths

Diabetes Hospitalizations Reported in the Michigan Inpatient Data Base (MIDB)⁷ In 2002, there were 19,496 hospital discharges of Macomb County residents where diabetes was listed among the diagnoses. There were 1,038 (5.3%) of these hospitalizations that were directly due to diabetes, while an additional 6,649 (34.1%) involved hypertension and cardiovascular disease, conditions commonly associated with diabetes. In 2000, the comparable figures were 16,620 discharges with 972 (5.9%) directly attributed to diabetes.

Primary Reason for Hospitalization

| Condition | 2000 | | 2002 | |
|--------------|---------------|---------|---------------|---------|
| | Count | Percent | Count | Percent |
| Diabetes | 972 | 5.9% | 1,038 | 5.3% |
| Hypertension | 296 | 1.8% | 338 | 1.7% |
| Other CVD | 6,032 | 36.3% | 6,311 | 32.4% |
| Kidney | 162 | 1.0% | 199 | 1.0% |
| Pneumonia | 518 | 3.1% | 584 | 3.0% |
| Other | 8,640 | 52.0% | 11,026 | 56.6% |
| TOTAL | 16,620 | | 19,496 | |

Non-Traumatic Lower Limb Amputations

In 2002, some form of non-traumatic lower limb amputation occurred in 100 or 9.6% of the 1,038 hospital discharges with a primary diagnosis of diabetes. This compares to 110 amputations or 11.3% of the 972 hospitalizations of persons with diabetes in 2000.

- 1) Michigan 2002 population estimates and the three year (2001-03) average from the Behavioral Risk Factor Surveillance System (BRFSS) - a statewide telephone survey of Michigan residents ages 18 years and older.
- 2) BRFSS data 2001 - 2003 rate of 8.65% ±1.64 Confidence Interval of 95% (CI).
- 3) Blue Cross/Blue Shield of Michigan Paid Claims Data, 2001 and BRFSS 2001-2003 data.
- 4) National Health and Nutrition Examination Survey, III 1988-1994 (NHANES III Series 11, No. 1).
- 5) US Health and Human Services news release, March 27, 2004.
- 6) Michigan Department of Community Health (MDCH) 2002 resident death data files.
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DIABETES IN MONROE COUNTY

Estimated Number of Persons With Diabetes (PWD) in Monroe County

Estimates from the Michigan Behavioral Risk Factor Surveillance System (BRFSS) using a three year average, 2001-2003, indicate that in 2002 approximately **7,640 adults (aged 18 and up) have been diagnosed with diabetes.**¹ This includes an estimated **270 Latinos/Hispanics (8.65%)** diagnosed with diabetes.² In addition, it is estimated that **100 or 0.32% persons under the age of 18** have been diagnosed with diabetes.³ National studies suggest that an additional **3,160 Monroe County adults have diabetes but are not aware of it.**⁴ Among Monroe County adults, **23,661 have pre-diabetes** (40.1% of adults 40-74 years of age).⁵

Estimated Number of Persons in Monroe County in 2002 Diagnosed with Diabetes (Rate per 100)¹

| Age Group | Total* | Female | Male | White |
|----------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 18-44 | 1,370 (2.4) | 770 (2.7) | 600 (2.1) | 1,320 (2.4) |
| 45-54 | 1,700 (7.4) | 970 (8.6) | 720 (6.2) | 1,570 (7.0) |
| 55-64 | 1,770 (12.3) | 790 (10.9) | 980 (13.6) | 1,730 (12.2) |
| 65-74 | 1,450 (16.1) | 850 (17.2) | 610 (14.9) | 1,380 (15.6) |
| 75+ | 1,350 (17.6) | 820 (16.6) | 530 (19.0) | 1,320 (17.3) |
| Total (95% CI**) | 7,640 (7.2) (±890) | 4,200 (7.7) (±620) | 3,440 (6.8) (±640) | 7,320 (7.2) (±890) |

* Difference in totals is due to presence of 330 of "other races" in the survey and the effects of rounding.

** 95% CI represents the range within which the actual number of persons with diabetes in Monroe County may fall with 95% confidence.

Diabetes Deaths

In 2002, diabetes was the fifth leading cause of death for Monroe County residents. Diabetes was the primary cause of death for 37 individuals (3.1% of all deaths) and a contributing cause in an additional 79 deaths (6.5%).⁶

Deaths in Monroe County of PWD for the Year 2002 with Diabetes Listed as the Primary Cause Number of Deaths (Rates per 1,000 Diabetic Population)

| Age Group | Total* | Female | White | Male |
|--------------|------------------|------------------|-------|------------------|
| 0-44 | 0 (NA) | 0 (NA) | | 0 (NA) |
| 45-54 | 1 (NA) | 0 (NA) | | 1 (NA) |
| 55-64 | 3 (NA) | 1 (NA) | | 2 (NA) |
| 65-74 | 5 (NA) | 2 (NA) | | 3 (NA) |
| 75+ | 28 (20.74) | 20 (25.32) | | 8 (15.69) |
| Total | 37 (4.84) | 23 (5.81) | | 14 (4.19) |

* Any difference in the totals is due to presence of deaths of "other races". NA – Not Able to calculate with 6 or less deaths

Diabetes Hospitalizations Reported in the Michigan Inpatient Data Base (MIDB)⁷ In 2002, there were 3,760 hospital discharges of Monroe County residents where diabetes was listed among the diagnoses. There were 296 (7.9%) of these hospitalizations that were directly due to diabetes, while an additional 1,286 (34.2%) involved hypertension and cardiovascular disease, conditions commonly associated with diabetes. In 2000, the comparable figures were 2,623 discharges with 165 (6.3%) directly attributed to diabetes.

Primary Reason for Hospitalization

| Condition | 2000 | | 2002 | |
|--------------|--------------|---------|--------------|---------|
| | Count | Percent | Count | Percent |
| Diabetes | 165 | 6.3% | 296 | 7.9% |
| Hypertension | 60 | 2.3% | 73 | 1.9% |
| Other CVD | 952 | 36.3% | 1,213 | 32.3% |
| Kidney | 26 | 1.0% | 63 | 1.7% |
| Pneumonia | 100 | 3.8% | 119 | 3.2% |
| Other | 1,320 | 50.3% | 1,996 | 53.1% |
| TOTAL | 2,623 | | 3,760 | |

Non-Traumatic Lower Limb Amputations

In 2002, some form of non-traumatic lower limb amputation occurred in 22 or 7.4% of the 296 hospital discharges with a primary diagnosis of diabetes. This compares to 10 amputations or 6.1% of the 165 hospitalizations of persons with diabetes in 2000.

- 1) Michigan 2002 population estimates and the three year (2001-03) average from the Behavioral Risk Factor Surveillance System (BRFSS) - a statewide telephone survey of Michigan residents ages 18 years and older.
- 2) BRFSS data 2001 - 2003 rate of 8.65% ±1.64 Confidence Interval of 95% (CI).
- 3) Blue Cross/Blue Shield of Michigan Paid Claims Data, 2001 and BRFSS 2001-2003 data.
- 4) National Health and Nutrition Examination Survey, III 1988-1994 (NHANES III Series 11, No. 1).
- 5) US Health and Human Services news release, March 27, 2004.
- 6) Michigan Department of Community Health (MDCH) 2002 resident death data files.
- 7) Michigan Inpatient (hospital discharge) Database (MIDB) for 2002.

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DIABETES IN OAKLAND COUNTY

Estimated Number of Persons With Diabetes (PWD) in Oakland County

Estimates from the Michigan Behavioral Risk Factor Surveillance System (BRFSS) using a three year average, 2001-2003, indicate that in 2002 approximately **69,860 adults (aged 18 and up) have been diagnosed with diabetes.**¹ This includes an estimated **2,530 Latinos/Hispanics (8.65%)** diagnosed with diabetes.² In addition, it is estimated that **770 or 0.32% persons under the age of 18** have been diagnosed with diabetes.³ National studies suggest that an additional **26,310 Oakland County adults have diabetes but are not aware of it.**⁴ Among Oakland County adults, **194,054 have pre-diabetes** (40.1% of adults 40-74 years of age).⁵

Estimated Number of Persons in Oakland County in 2002 Diagnosed with Diabetes (Rate per 100)¹

| Age Group | Total* | Female | Male | White | African American |
|----------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| 18-44 | 11,640 (2.5) | 4,930 (2.1) | 6,710 (2.9) | 8,190 (2.2) | 1,930 (3.6) |
| 45-54 | 17,740 (9.4) | 7,700 (7.9) | 10,000 (10.8) | 13,950 (8.7) | 2,680 (13.2) |
| 55-64 | 17,740 (14.9) | 8,690 (14.4) | 9,050 (15.4) | 13,600 (13.2) | 2,990 (26.4) |
| 65-74 | 11,450 (16.6) | 5,630 (14.9) | 5,810 (18.7) | 9,280 (15.1) | 2,220 (42.1) |
| 75+ | 11,290 (16.6) | 6,980 (16.2) | 4,580 (18.4) | 10,200 (16.1) | 1,110 (30.5) |
| Total (95% CI**) | 69,860 (7.4) (±6,760) | 33,930 (7.0) (±4,510) | 36,150 (7.8) (±4,980) | 55,220 (6.9) (±5,690) | 10,930 (10.8) (±2,990) |

* Difference in totals is due to presence of 4,380 "other races" in the survey and the effects of rounding.

** 95% CI represents the range within which the actual number of persons with diabetes in Oakland County may fall with 95% confidence.

Diabetes Deaths

In 2002, diabetes was the sixth leading cause of death for Oakland County residents. Diabetes was the primary cause of death for 223 individuals (2.4% of all deaths) and a contributing cause in an additional 440 deaths (4.8%).⁶

Deaths in Oakland County of PWD for the Year 2002 with Diabetes Listed as the Primary Cause Number of Deaths (Rates per 1,000 Diabetic Population)

| Age Group | Total* | Female | Male | White | Female | Male |
|--------------|-------------------|-------------------|------------------|-------|------------------|-----------------|
| 0-44 | 5 (NA) | 2 (NA) | 3 (NA) | | 0 (NA) | 0 (NA) |
| 45-54 | 16 (0.90) | 5 (NA) | 8 (0.96) | | 1 (NA) | 2 (NA) |
| 55-64 | 24 (1.35) | 12 (1.70) | 10 (1.53) | | 0 (NA) | 2 (NA) |
| 65-74 | 51 (4.45) | 18 (4.09) | 26 (5.35) | | 4 (NA) | 3 (NA) |
| 75+ | 127 (11.25) | 73 (12.09) | 42 (10.47) | | 10 (12.82) | 1 (NA) |
| Total | 223 (3.19) | 110 (4.21) | 89 (3.12) | | 15 (2.37) | 8 (1.71) |

*Any difference in the totals is due to presence of deaths of "other races". NA – Not Able to calculate with 6 or less deaths

Diabetes Hospitalizations Reported in the Michigan Inpatient Data Base (MIDB)⁷ In 2002, there were 22,222 hospital discharges of Oakland County residents where diabetes was listed among the diagnoses. There were 1,551 (7.0%) of these hospitalizations that were directly due to diabetes, while an additional 7,188 (32.3%) involved hypertension and cardiovascular disease, conditions commonly associated with diabetes. In 2000, the comparable figures were 19,307 discharges with 1,463 (7.6%) directly attributed to diabetes.

Primary Reason for Hospitalization

| Condition | 2000 | | 2002 | |
|--------------|---------------|---------|---------------|---------|
| | Count | Percent | Count | Percent |
| Diabetes | 1,463 | 7.6% | 1,551 | 7.0% |
| Hypertension | 377 | 2.0% | 435 | 2.0% |
| Other CVD | 6,374 | 33.0% | 6,753 | 30.4% |
| Kidney | 176 | 0.9% | 277 | 1.2% |
| Pneumonia | 573 | 3.0% | 714 | 3.2% |
| Other | 10,344 | 53.6% | 12,492 | 56.2% |
| TOTAL | 19,307 | | 22,222 | |

Non-Traumatic Lower Limb Amputations

In 2002, some form of non-traumatic lower limb amputation occurred in 145 or 9.3% of the 1,551 hospital discharges with a primary diagnosis of diabetes. This compares to 133 amputations or 9.1% of the 1,463 hospitalizations of persons with diabetes in 2000.

- 1) Michigan 2002 population estimates and the three year (2001-03) average from the Behavioral Risk Factor Surveillance System (BRFSS) - a statewide telephone survey of Michigan residents ages 18 years and older.
- 2) BRFSS data 2001 - 2003 rate of 8.65% ±1.64 Confidence Interval of 95% (CI).
- 3) Blue Cross/Blue Shield of Michigan Paid Claims Data, 2001 and BRFSS 2001-2003 data.
- 4) National Health and Nutrition Examination Survey, III 1988-1994 (NHANES III Series 11, No. 1).
- 5) US Health and Human Services news release, March 27, 2004.
- 6) Michigan Department of Community Health (MDCH) 2002 resident death data files.
- 7) Michigan Inpatient (hospital discharge) Database (MIDB) for 2002.

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DIABETES IN ST. CLAIR COUNTY

Estimated Number of Persons With Diabetes (PWD) in St. Clair County

Estimates from the Michigan Behavioral Risk Factor Surveillance System (BRFSS) using a three year average, 2001-2003, indicate that in 2002 approximately **8,820 adults (aged 18 and up) have been diagnosed with diabetes.**¹ This includes an estimated **310 Latinos/Hispanics (8.65%)** diagnosed with diabetes.² In addition, it is estimated that **110 or 0.32% persons under the age of 18** have been diagnosed with diabetes.³ National studies suggest that an additional **3,630 St. Clair County adults have diabetes but are not aware of it.**⁴ Among St. Clair County adults, **26,320 have pre-diabetes** (40.1% of adults 40-74 years of age).⁵

Estimated Number of Persons in St. Clair County in 2002 Diagnosed with Diabetes (Rate per 100)¹

| Age Group | Total* | Female | Male | White |
|----------------------------|---------------------------------|-------------------------------|-------------------------------|---------------------------------|
| 18-44 | 1,530 (2.4) | 860 (2.7) | 670 (2.1) | 1,460 (2.4) |
| 45-54 | 1,840 (7.4) | 1,060 (8.6) | 770 (6.2) | 1,690 (7.0) |
| 55-64 | 1,990 (12.3) | 890 (10.9) | 1,090 (13.6) | 1,930 (12.2) |
| 65-74 | 1,690 (16.1) | 960 (17.2) | 730 (14.9) | 1,610 (15.6) |
| 75+ | 1,770 (17.6) | 1,050 (16.6) | 710 (19.0) | 1,710 (17.3) |
| Total (95% CI**) | 8,820 (7.2) (±1,000) | 4,820 (7.7) (±700) | 3,970 (6.8) (±720) | 8,400 (7.2) (±1,000) |

* Difference in totals is due to presence of 380 of "other races" in the survey and the effects of rounding.

** 95% CI represents the range within which the actual number of persons with diabetes in St. Clair County may fall with 95% confidence.

Diabetes Deaths

In 2002, diabetes was the fifth leading cause of death for St. Clair County residents. Diabetes was the primary cause of death for 56 individuals (3.7% of all deaths) and a contributing cause in an additional 98 deaths (6.5%).⁶

Deaths in St. Clair County of PWD for the Year 2002 with Diabetes Listed as the Primary Cause Number of Deaths (Rates per 1,000 Diabetic Population)

| Age Group | Total* | Female | White | Male |
|--------------|------------------|------------------|-------|------------------|
| 0-44 | 3 (NA) | 1 (NA) | | 2 (NA) |
| 45-54 | 2 (NA) | 0 (NA) | | 2 (NA) |
| 55-64 | 5 (NA) | 2 (NA) | | 3 (NA) |
| 65-74 | 12 (7.10) | 3 (NA) | | 7 (10.14) |
| 75+ | 34 (19.21) | 17 (16.67) | | 15 (21.74) |
| Total | 56 (6.35) | 23 (5.05) | | 29 (7.55) |

* Any difference in the totals is due to presence of deaths of "other races". NA – Not Able to calculate with 6 or less deaths

Diabetes Hospitalizations Reported in the Michigan Inpatient Data Base (MIDB)⁷ In 2002, there were 3,489 hospital discharges of St. Clair County residents where diabetes was listed among the diagnoses. There were 236 (6.8%) of these hospitalizations that were directly due to diabetes, while an additional 1,202 (34.5%) involved hypertension and cardiovascular disease, conditions commonly associated with diabetes. In 2000, the comparable figures were 3,287 discharges with 230 (7.0%) directly attributed to diabetes.

Primary Reason for Hospitalization

| Condition | 2000 | | 2002 | |
|--------------|--------------|---------|--------------|---------|
| | Count | Percent | Count | Percent |
| Diabetes | 230 | 7.0% | 236 | 6.8% |
| Hypertension | 92 | 2.8% | 88 | 2.5% |
| Other CVD | 1,219 | 37.1% | 1,114 | 31.9% |
| Kidney | 23 | 0.7% | 62 | 1.8% |
| Pneumonia | 108 | 3.3% | 132 | 3.8% |
| Other | 1,615 | 49.1% | 1,857 | 53.2% |
| TOTAL | 3,287 | | 3,489 | |

Non-Traumatic Lower Limb Amputations

In 2002, some form of non-traumatic lower limb amputation occurred in 0 or 0.0% of the 236 hospital discharges with a primary diagnosis of diabetes. This compares to 16 amputations or 7.0% of the 230 hospitalizations of persons with diabetes in 2000.

- 1) Michigan 2002 population estimates and the three year (2001-03) average from the Behavioral Risk Factor Surveillance System (BRFSS) - a statewide telephone survey of Michigan residents ages 18 years and older.
- 2) BRFSS data 2001 - 2003 rate of 8.65% ±1.64 Confidence Interval of 95% (CI).
- 3) Blue Cross/Blue Shield of Michigan Paid Claims Data, 2001 and BRFSS 2001-2003 data.
- 4) National Health and Nutrition Examination Survey, III 1988-1994 (NHANES III Series 11, No. 1).
- 5) US Health and Human Services news release, March 27, 2004.
- 6) Michigan Department of Community Health (MDCH) 2002 resident death data files.
- 7) Michigan Inpatient (hospital discharge) Database (MIDB) for 2002.

Further information can be obtained from:

Michigan Department of Community Health, Division of Chronic Disease and Injury Control/Diabetes, Kidney and Other Chronic Diseases Section
by calling (517) 335-8445 or on the WEB at: <http://www.michigan.gov/diabetes>

DIABETES IN WASHTENAW COUNTY

Estimated Number of Persons With Diabetes (PWD) in Washtenaw County

Estimates from the Michigan Behavioral Risk Factor Surveillance System (BRFSS) using a three year average, 2001-2003, indicate that in 2002 approximately **16,850 adults (aged 18 and up) have been diagnosed with diabetes.**¹ This includes an estimated **770 Latinos/Hispanics (8.65%)** diagnosed with diabetes.² In addition, it is estimated that **200 or 0.32% persons under the age of 18** have been diagnosed with diabetes.³ National studies suggest that an additional **6,130 Washtenaw County adults have diabetes but are not aware of it.**⁴ Among Washtenaw County adults, **45,186 have pre-diabetes** (40.1% of adults 40-74 years of age).⁵

Estimated Number of Persons in Washtenaw County in 2002 Diagnosed with Diabetes (Rate per 100)¹

| Age Group | Total* | Female | Male | White | African American |
|----------------------------|----------------------------------|---------------------------------|---------------------------------|----------------------------------|-------------------------------|
| 18-44 | 3,920 (2.5) | 1,630 (2.1) | 2,300 (2.9) | 2,590 (2.2) | 700 (3.6) |
| 45-54 | 4,310 (9.4) | 1,870 (7.9) | 2,430 (10.8) | 3,370 (8.7) | 670 (13.2) |
| 55-64 | 4,020 (14.9) | 1,960 (14.4) | 2,060 (15.4) | 3,060 (13.2) | 700 (26.4) |
| 65-74 | 2,420 (16.6) | 1,160 (14.9) | 1,270 (18.7) | 1,890 (15.1) | 560 (42.1) |
| 75+ | 2,180 (16.6) | 1,330 (16.2) | 900 (18.4) | 1,900 (16.1) | 330 (30.5) |
| Total (95% CI**) | 16,850 (7.4) (±1,910) | 7,950 (7.0) (±1,240) | 8,960 (7.8) (±1,440) | 12,810 (6.9) (±1,530) | 2,960 (10.8) (±940) |

* Difference in totals is due to presence of 1,260 of "other races" in the survey and the effects of rounding.

** 95% CI represents the range within which the actual number of persons with diabetes in Washtenaw County may fall with 95% confidence.

Diabetes Deaths

In 2002, diabetes was the fifth leading cause of death for Washtenaw County residents. Diabetes was the primary cause of death for 64 individuals (3.5% of all deaths) and a contributing cause in an additional 109 deaths (6%).⁶

Deaths in Washtenaw County of PWD for the Year 2002 with Diabetes Listed as the Primary Cause Number of Deaths (Rates per 1,000 Diabetic Population)

| Age Group | Total* | Female | Male | White | Female | Male |
|--------------|------------------|------------------|------------------|-------|---------------|-----------------|
| 0-44 | 5 (NA) | 1 (NA) | 1 (NA) | | 1 (NA) | 2 (NA) |
| 45-54 | 4 (NA) | 1 (NA) | 1 (NA) | | 1 (NA) | 1 (NA) |
| 55-64 | 6 (NA) | 3 (NA) | 0 (NA) | | 1 (NA) | 2 (NA) |
| 65-74 | 12 (4.96) | 9 (10.34) | 2 (NA) | | 0 (NA) | 1 (NA) |
| 75+ | 37 (16.97) | 19 (16.96) | 12 (15.79) | | 2 (NA) | 3 (NA) |
| Total | 64 (3.80) | 33 (5.61) | 16 (2.36) | | 5 (NA) | 9 (6.57) |

*Any difference in the totals is due to presence of deaths of "other races". NA – Not Able to calculate with 6 or less deaths

Diabetes Hospitalizations Reported in the Michigan Inpatient Data Base (MIDB)⁷ In 2002, there were 4,492 hospital discharges of Washtenaw County residents where diabetes was listed among the diagnoses. There were 366 (8.1%) of these hospitalizations that were directly due to diabetes, while an additional 1,267 (28.2%) involved hypertension and cardiovascular disease, conditions commonly associated with diabetes. In 2000, the comparable figures were 3,969 discharges with 317 (8.0%) directly attributed to diabetes.

Primary Reason for Hospitalization

| Condition | 2000 | | 2002 | |
|--------------|--------------|---------|--------------|---------|
| | Count | Percent | Count | Percent |
| Diabetes | 317 | 8.0% | 366 | 8.1% |
| Hypertension | 45 | 1.1% | 40 | 0.9% |
| Other CVD | 1,218 | 30.7% | 1,227 | 27.3% |
| Kidney | 47 | 1.2% | 56 | 1.2% |
| Pneumonia | 128 | 3.2% | 162 | 3.6% |
| Other | 2,214 | 55.8% | 2,641 | 58.8% |
| TOTAL | 3,969 | | 4,492 | |

Non-Traumatic Lower Limb Amputations

In 2002, some form of non-traumatic lower limb amputation occurred in 38 or 10.4% of the 366 hospital discharges with a primary diagnosis of diabetes. This compares to 24 amputations or 7.6% of the 317 hospitalizations of persons with diabetes in 2000.

- 1) Michigan 2002 population estimates and the three year (2001-03) average from the Behavioral Risk Factor Surveillance System (BRFSS) - a statewide telephone survey of Michigan residents ages 18 years and older.
- 2) BRFSS data 2001 - 2003 rate of 8.65% ±1.64 Confidence Interval of 95% (CI).
- 3) Blue Cross/Blue Shield of Michigan Paid Claims Data, 2001 and BRFSS 2001-2003 data.
- 4) National Health and Nutrition Examination Survey, III 1988-1994 (NHANES III Series 11, No. 1).
- 5) US Health and Human Services news release, March 27, 2004.
- 6) Michigan Department of Community Health (MDCH) 2002 resident death data files.
- 7) Michigan Inpatient (hospital discharge) Database (MIDB) for 2002.

Further information can be obtained from:

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DIABETES IN WAYNE COUNTY

Estimated Number of Persons With Diabetes (PWD) in Wayne County

Estimates from the Michigan Behavioral Risk Factor Surveillance System (BRFSS) using a three year average, 2001-2003, indicate that in 2002 approximately **142,640 adults (aged 18 and up) have been diagnosed with diabetes.**¹ This includes an estimated **6,740 Latinos/Hispanics (8.65%)** diagnosed with diabetes.² In addition, it is estimated that **1,470 or 0.32% persons under the age of 18** have been diagnosed with diabetes.³ National studies suggest that an additional **49,480 Wayne County adults have diabetes but are not aware of it.**⁴ Among Wayne County adults, **295,516 have pre-diabetes** (40.1% of adults 40-74 years of age).⁵

Estimated Number of Persons in Wayne County in 2002 Diagnosed with Diabetes (Rate per 100)¹

| Age Group | Total* | Female | Male | White | African American |
|----------------------------|------------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| 18-44 | 23,450 (2.5) | 10,710 (2.1) | 12,740 (2.9) | 8,320 (2.2) | 10,710 (3.6) |
| 45-54 | 30,140 (9.4) | 15,510 (7.9) | 14,630 (10.8) | 13,010 (8.7) | 13,060 (13.2) |
| 55-64 | 32,530 (14.9) | 16,740 (14.4) | 15,790 (15.4) | 13,630 (13.2) | 18,070 (26.4) |
| 65-74 | 28,790 (16.6) | 15,940 (14.9) | 12,850 (18.7) | 11,910 (15.1) | 17,160 (42.1) |
| 75+ | 27,730 (16.6) | 16,900 (16.2) | 10,830 (18.4) | 14,230 (16.1) | 11,800 (30.5) |
| Total (95% CI**) | 142,640 (7.4) (±21,760) | 75,800 (7.0) (±16,790) | 66,840 (7.8) (±13,740) | 61,100 (6.9) (±14,630) | 70,800 (10.8) (±15,760) |

* Difference in totals is due to presence of 10,740 of "other races" in the survey and the effects of rounding.

** 95% CI represents the range within which the actual number of persons with diabetes in Wayne county may fall with 95% confidence.

Diabetes Deaths

In 2002, diabetes was the sixth leading cause of death for Wayne County residents. Diabetes was the primary cause of death for 591 individuals (3% of all deaths) and a contributing cause in an additional 1,061 deaths (5.3%).⁶

Deaths in Wayne County of PWD for the Year 2002 with Diabetes Listed as the Primary Cause Number of Deaths (Rates per 1,000 Diabetic Population)

| Age Group | Total* | Female | Male | White Female | White Male | African American Female | African American Male |
|--------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------------|-----------------------|
| 0-44 | 28 (1.19) | 5 (NA) | 5 (NA) | 8 (1.30) | 9 (1.98) | | |
| 45-54 | 53 (1.76) | 6 (NA) | 14 (1.93) | 12 (1.39) | 20 (4.52) | | |
| 55-64 | 77 (2.37) | 19 (2.71) | 19 (2.87) | 20 (2.19) | 19 (2.12) | | |
| 65-74 | 133 (4.62) | 30 (5.08) | 35 (5.83) | 43 (3.86) | 24 (3.99) | | |
| 75+ | 300 (10.82) | 101 (12.14) | 84 (14.21) | 71 (8.79) | 41 (11.02) | | |
| Total | 591 (4.14) | 161 (5.30) | 157 (5.11) | 154 (3.57) | 113 (4.09) | | |

*Any difference in the totals is due to presence of deaths of "other races". NA – Not Able to calculate with 6 or less deaths

Diabetes Hospitalizations Reported in the Michigan Inpatient Data Base (MIDB)⁷ In 2002, there were 61,334 hospital discharges of Wayne County residents where diabetes was listed among the diagnoses. There were 5,354 (8.7%) of these hospitalizations that were directly due to diabetes, while an additional 19,144 (31.2%) involved hypertension and cardiovascular disease, conditions commonly associated with diabetes. In 2000, the comparable figures were 54,670 discharges with 5,022 (9.2%) directly attributed to diabetes.

Primary Reason for Hospitalization

| Condition | 2000 | | 2002 | |
|--------------|---------------|---------|---------------|---------|
| | Count | Percent | Count | Percent |
| Diabetes | 5,022 | 9.2% | 5,354 | 8.7% |
| Hypertension | 1,798 | 3.3% | 1,896 | 3.1% |
| Other CVD | 16,270 | 29.8% | 17,248 | 28.1% |
| Kidney | 705 | 1.3% | 980 | 1.6% |
| Pneumonia | 1,815 | 3.3% | 2,092 | 3.4% |
| Other | 29,060 | 53.2% | 33,764 | 55.0% |
| TOTAL | 54,670 | | 61,334 | |

Non-Traumatic Lower Limb Amputations

In 2002, some form of non-traumatic lower limb amputation occurred in 439 or 8.2% of the 5,354 hospital discharges with a primary diagnosis of diabetes. This compares to 448 amputations or 8.9% of the 5,022 hospitalizations of persons with diabetes in 2000.

- 1) Michigan 2002 population estimates and the three year (2001-03) average from the Behavioral Risk Factor Surveillance System (BRFSS) - a statewide telephone survey of Michigan residents ages 18 years and older.
- 2) BRFSS data 2001 - 2003 rate of 8.65% ±1.64 Confidence Interval of 95% (CI).
- 3) Blue Cross/Blue Shield of Michigan Paid Claims Data, 2001 and BRFSS 2001-2003 data.
- 4) National Health and Nutrition Examination Survey, III 1988-1994 (NHANES III Series 11, No. 1).
- 5) US Health and Human Services news release, March 27, 2004.
- 6) Michigan Department of Community Health (MDCH) 2002 resident death data files.
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